natural LEADERS: The power of a sustainable future

Chelan County Public Utility District 2011
Seventy-five years already … three-quarters of a century. We can look around at how well our facilities and our natural surroundings are faring and be confident about our stewardship for another 75 years – and beyond.

The clean, natural power of falling water has been the mainstay of our services since the PUD was created by a vote of county residents in 1936. With our acquisition of Rock Island Dam and the Lake Chelan Project, we expanded on what others had built and took steps to boost production of reliable, renewable power. At Rocky Reach Dam, which we built ourselves in 1956-61, we are working with the state Department of Ecology to explore ways of adding water storage that could benefit customers, irrigation, fish and power production.

With Douglas County PUD, our neighbor across the Columbia River, we negotiated the first Habitat Conservation Plans of their kind for hydropower. The plans for our Rock Island and Rocky Reach dams promise “no net impact” on fish from power operations. We continue to abide by that pledge and have found cost-effective ways to enhance fish resources.

This report sets forth our philosophy, presents some of our accomplishments and offers our expectations for the future. We will use our extensive resources to benefit our customers—and protect the natural surroundings—for a long, long time.

- John Janney

Chelan PUD general manager

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Collaboration enhances success

While clean, reliable hydropower is our biggest contribution to a sustainable environment, Chelan County PUD helps in other ways as well. Clean domestic water provided from our collaborative operation of the regional water system enables rural areas of the county to develop and grow. Our small wastewater systems help several communities keep natural resources clean and refreshed. Millions of visitors enjoy parks we have built along the scenic shores of Lake Chelan and the Columbia River, some of which are operated by other responsible agencies.

Our long-term Strategic Plan declares, among other things, that we will "Operate responsibly by creating and continuing principles and practices that protect and enhance our natural resources." That’s a pledge we endorse and live up to, now and in the future.
Celebrating the 75th anniversary of public power in Chelan County in 2011

Public power at your service

Chelan County PUD was created by a vote of the people in 1936 and delivered its first power in 1947. It is governed by a locally elected Board of Commissioners. The general manager uses the policies and guiding principles set by the board to operate a utility system that includes water, sewer and wholesale fiber-optic service. The PUD generates and delivers electricity from its three dams to more than 47,000 retail customers in the county and to other utilities that serve customers across the Pacific Northwest.

“[I wanted to get us into business. I wanted to start talking to Puget Sound Power & Light to see if they would sell the system in Chelan County to the PUD. We started negotiating.]”

- Kirby Billingsley
  Chelan PUD manager, 1953-1958

We have a commitment to serve – past, present and future.

Chelan County Public Utility District 2011
The power of innovation protects fish and ensures clean, renewable power for people.
The power of renewable energy

Hydropower is the nation’s leading renewable energy resource

- Hydropower is America’s largest source of clean, renewable electricity, accounting for 67 percent of domestic renewable generation and 7 percent of total electricity generation.
- U.S. hydropower generation annually avoids 225 million metric tons of carbon emissions, equivalent to the output of about 42 million passenger cars.
- Hydropower helps stabilize America’s electric grid with the ability to adjust output rapidly, to serve real-time electricity demand.

Source: National Hydropower Association

Enriching our supply of renewable hydropower with solar, wind and efficiency gains

As owners and operators of three hydropower dams, we are blessed with a reliable source of clean, renewable energy for Chelan County customers and for utility customers across the Northwest.

Hydropower provides an important base for the region’s growing wind and solar power generation.

We’ve kept the dams safe and in good shape with significant investments to modernize the turbines, generators and controls at the Rocky Reach and Lake Chelan dams and with similar work under way at Rock Island Dam.

Efficiency gains bring the ability to generate more clean power from the same amount of water and ensure reliable service for decades to come.

In response to strong interest (and funding) from the Washington State Department of Ecology, Chelan PUD is investigating the possibility of developing water storage projects on the Columbia River.

This could include two primary methods:
- Raising the elevation of the reservoir behind Rocky Reach Dam by 1 to 3 feet and releasing the stored water as needed to increase downstream flows for fish, people and irrigation.
- Developing means of storing water for a variety of uses.

Solar panels on the roof of Wenatchee Valley College are among the installations made possible by SNAP (Sustainable Natural Alternative Power), Chelan PUD’s award-winning renewable energy program.

Chelan PUD’s share of the Nine Canyon Wind Project provides about 2 average megawatts of renewable electricity.

Modernizing the two units in the Lake Chelan Powerhouse increased output of renewable hydropower from 48 megawatts to 59.

Replacing units in Powerhouse 1 at Rock Island Dam is expected to increase output by 12 percent. That means more renewable electricity can be made with the same amount of water.

Chelan PUD’s renewable hydropower is sustainable, affordable energy.
The power of community

Joining with our customers, visitors, agencies and tribes to benefit from public power

We are all connected by the cool, clear waters of Chelan County used to generate clean, renewable hydropower, nurture fish and wildlife, raise crops and provide recreation. In addition to making and delivering electricity, Chelan PUD reaches out to:

- Support classroom science and community programs;
- Link local solar, wind and small hydro producers with folks who want to support green energy;
- Extend rural access to high-speed Internet service;
- Welcome 3 million visitors a year to PUD-built parks.

We provide sustainable, reliable utility services that enhance the quality of life in Chelan County.

The “River of Power” program brings hundreds of fourth-graders to Rocky Reach Dam each year for a day of hands-on science, history, math and art lessons focused on the Columbia River.

Washington State Parks are destinations of uncommon quality. Chelan County PUD has been a leader in the use of open, honest relationships to cooperatively work with State Parks to provide ‘quality of life’ opportunities for citizens, visitors to the community and for the entire state.

- Jim Harris
Regional manager
Washington State Parks and Recreation

Listening and responding is a strength of public power.

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The power of commitment

Affirming our promise to look at success from a financial, environmental and social point of view while operating in a sustainable way and ensuring affordable, reliable services for the county and the region.

Chelan PUD has accomplished much in 75 years. Perhaps even more important is the service we’ll continue to provide for future generations.

Following the approach laid out in our Strategic Plan we’re:

- Developing plans to meet the regulatory and environmental challenges we can foresee.
- Relying on the expertise of our employees to respond to those issues – sure to come – that aren’t on our radar today.

We continue to monitor fish survival, fine-tune hatchery operations and work with agencies and tribes on habitat projects as we approach the 2013 check-in on our Habitat Conservation Plans. We’re carrying out the programs called for in the new licenses for the Rocky Reach and Lake Chelan hydro projects and modernizing aging generating units.

We’ve got a lot of work to do and our skilled and dedicated employees are up to the challenge.

Chelan PUD’s wholesale fiber-optic network has brought access to high-speed Internet, phone and TV service provided by private firms to about 70 percent of residents in our mostly rural county.

Survival studies of yearling Chinook passing Rocky Reach Dam will continue in 2011-2013.

Looking out for lamprey and sturgeon

As called for in the new license to operate Rocky Reach Dam, in cooperation with natural resource agencies and tribes, we are taking the following steps:

**White sturgeon**

- Starting a three-year program in 2011 to stock up to 6,500 juveniles in the Rocky Reach Reservoir;
- Monitoring the results of fish stocking program;
- Finding sources for adult broodstock for future stocking.

**Pacific lamprey**

- Continuing to install adult upstream passage improvements;
- Studying how well passage improvements are working;
- Looking at the feasibility of raising lamprey;
- Assessing young lamprey habitat and how to improve it.

We connect with customers, the community, other agencies and interested parties in many ways. For the recent update of the Strategic Plan, efforts included more than a year of surveys, community meetings, focus groups and discussion with business and community leaders.

We honor our commitments now and for generations to come.

Chelan County Public Utility District
Measuring and evaluating our progress as we move toward a sustainable future

Chelan PUD uses science and innovation to ensure we’re meeting program goals and objectives.

Habitat Conservation Plans

Here are results of the programs and studies called for under the landmark plans for Rocky Reach and Rock Island dams that require a three-pronged approach of fish survival, hatchery production and habitat restoration to ensure our hydropower projects are operated with no net impact on migrating fish.

Young salmon and steelhead survival

Under the HCPs Chelan PUD must measure juvenile fish survival through our reservoirs and past our dams. The minimum survival level is 93 percent. The District has met or exceeded that level for most fish migrating in the spring.*

<table>
<thead>
<tr>
<th>Spring Species</th>
<th>Rocky Island Dam</th>
<th>Rock Island Dam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sockeye</td>
<td>93.27</td>
<td>93.59</td>
</tr>
<tr>
<td>Spring Chinook</td>
<td>93.75</td>
<td>Still testing</td>
</tr>
<tr>
<td>Steelhead</td>
<td>96.75</td>
<td>95.79</td>
</tr>
</tbody>
</table>

*Once technology becomes available, Chelan PUD will measure survival levels for the smaller Chinook which migrate in the summer. At this point there is no technology to measure survival for these fish.

Tributary projects

Chelan PUD funded our first habitat project in 2005 as part of compensating for fish that do not survive migration through our reservoirs and past our dams. Chelan PUD funds two accounts which are used by a committee to award money to projects that members decide will have the best biological outcome.

<table>
<thead>
<tr>
<th>HCP Habitat Account</th>
<th>No. of Projects to date</th>
<th>Funding provided to date*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rocky Reach</td>
<td>15</td>
<td>$1,082,839</td>
</tr>
<tr>
<td>Rock Island</td>
<td>23</td>
<td>$2,262,417</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>$3,345,256</td>
</tr>
</tbody>
</table>

*as of Dec. 1, 2010

Hatchery production

Chelan PUD funds hatchery production as part of the no-net-impact requirement of the HCPs. These initial production requirements will expire in 2013 and be recalculated based on project survival and other factors.

<table>
<thead>
<tr>
<th>Species</th>
<th>Location</th>
<th>2010 production targets (fish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Chinook</td>
<td>Wenatchee River</td>
<td>298,000</td>
</tr>
<tr>
<td></td>
<td>Methow River</td>
<td>288,000</td>
</tr>
<tr>
<td>Summer Chinook</td>
<td>Wenatchee River</td>
<td>864,000</td>
</tr>
<tr>
<td></td>
<td>Similkameen River</td>
<td>576,000</td>
</tr>
<tr>
<td></td>
<td>Methow River</td>
<td>400,000</td>
</tr>
<tr>
<td></td>
<td>Chelan Falls</td>
<td>600,000</td>
</tr>
<tr>
<td>Sockeye</td>
<td>Lake Wenatchee</td>
<td>280,000</td>
</tr>
<tr>
<td></td>
<td>Skaha Lake, BC</td>
<td>591,000</td>
</tr>
<tr>
<td>Steelhead</td>
<td>Wenatchee River</td>
<td>400,000</td>
</tr>
</tbody>
</table>

Local green power

Renewable energy gained through conservation and the Sustainable Natural Alternative Power (SNAP) program is a cost-effective power source for our customers and the PUD.

| SNAP power production (kilowatt-hours since 2001) | 607,087 |
| Conservation programs (kilowatt-hours saved since 1982) | 65,412,235 |

Supporting results

Sustainable steps

What we’re doing

Building on our foundation of clean, renewable hydropower by promoting sustainable practices to increase efficiency, use renewable resources and decrease waste production.

What it means

Sustainability is using, developing and protecting social and natural resources in a manner that allows people to meet their current needs without compromising the ability of future generations to meet their needs.

How we’re doing it

Reducing truck idling time is one way

As part of its sustainability efforts, Chelan County PUD is testing new technology on its fleet of diesel trucks. New equipment allows the engines to be turned off to reduce idling time while still enabling PUD crews to run electric power equipment from the trucks and keep other vehicle systems operating with enhanced battery power.

In the initial tests on a sampling of trucks in late 2009 and early 2010:

- Engine idling time has been reduced by about a third
- Engine life has been extended an estimated three years

With tests complete, we’ve installed the equipment on 10 vehicles so far. When installation is finished on the 30 large vehicles that will benefit the most:

- Greenhouse gas emissions will be reduced an estimated 109 metric tons annually
- Annual diesel fuel savings will be approximately $28,900
- Annual vehicle maintenance will be reduced an estimated $113,500

We’re staying on track to reach our goals.
Vision:
To be valued as an innovative, trusted and highly respected public utility for generations to come.

Mission:
To provide sustainable, reliable utility services that enhance the quality of life in Chelan County.

Values:
Service: We focus on providing excellent customer service.
Respect: We believe that the concerns of our communities, resource agencies and our employees are important.
Innovation: We encourage innovation, creative thinking and new ideas.
Ethics and Fairness: We value people who are honorable in principles, intentions and actions.
Teamwork: We are all part of the same team with the same objectives.
Operational Excellence: Our service quality, reliability and care for the environment are viewed as a vital part of operational excellence.
Safety: We have a strong commitment to public and employee safety as an integral part of our daily work.